



SUNPOWER TECHNOLOGY CORP.
 16F-1, No.150, Jian 1st Rd., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.)
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SDS-100M-xx Series

100W, Single Output
 DC-DC Converter



159 x 95 x 38 mm
 6.26 x 3.74 x 1.50 inch



Features:

- * DC Input 19V ~ 72V (TYPICAL 48V)
- * Input protection: 8A/250V fuses
- * Inrush current limitation soft start function
- * Input & output isolation
- * Input polarity reverse protection
- * Over voltage, over load & short circuit protection
- * Output voltage $\pm 10\%$ adjustment
- * 100% full load burn-in test
- * -20°C to 70°C operating temperature
- * Meet LVD standard
- * 2 years warranty

Specification:

| | | | | | | |
|-------------|--------------------------------------|--|------------|------------|------------|------------|
| INPUT | Voltage | DC 19V ~ 72V (TYPICAL 48V) | | | | |
| | Current | 5.5A max at 24V DC input, full load condition | | | | |
| OUTPUT | Voltage | 5V | 12V | 24V | 36V | 48V |
| | Min Load | 0A | 0A | 0A | 0A | 0A |
| | Max Load | 16A | 8.4A | 4.2A | 2.8A | 2.1A |
| | Output Tolerance ② | $\pm 2\%$ | $\pm 1\%$ | $\pm 1\%$ | $\pm 1\%$ | $\pm 1\%$ |
| | Ripple Noise MAX. ③ | 70mV | 120mV | 200mV | 240mV | 240mV |
| | Efficiency (TYP) | 78% | 84% | 85% | 86% | 87% |
| PROTECTION | Output MAX. | 80W | 101W | 101W | 101W | 101W |
| | Over Voltage | 5.8~7.0V | 13.8~16.8V | 27.6~33.6V | 41.4~50.4V | 55.2~67.2V |
| | | Shutdown and latch off, recover after re-start up. | | | | |
| | Over Load & Short Circuit | When power supply over 105%~ 150% max load or short circuit acted, power supply will be shutdown and recover automatically after the fault is removed. | | | | |
| ELEC. CHAR. | Rise time | <30mS | | | | |
| ENVIRONMENT | Temperature ④ | Operating: -20 ~ +70°C ; De-rating: 45 ~ 70°C : 2.5%/°C ; Storage: -40 ~ +85°C | | | | |
| | Humidity | Operating: 20% ~ 90% RH (non condensing); Storage: 10% ~ 95% RH (non condensing) | | | | |
| SAFETY | Withstand voltage | I/P-O/P:2.0KVAC, I/P-PE:1.5KVAC, O/P-PE:0.5KVAC, 1minute | | | | |
| | Isolation resistance | I/P-O/P, I/P-PE, O/P-PE > 100MΩ/500VDC at 25°C / 70% RH | | | | |
| EMC | EMI | EN 55022 CLASS B 、 FCC CFR 47 PART 15 CLASS B 、 CNS 13438 CLASS B. | | | | |
| | EMS | EN 55024 : EN 61000-4-2,3,4,5,6,8 ; ENV 50204 | | | | |
| OTHERS | Cooling | Natural cooling | | | | |
| | M.T.B.F. | 254 K hours | | | | |
| | Dimension | 159 x 95 x 38 mm (L*W*H) | | | | |
| | Packing | N.W.: 0.69 Kg / 1pc; 24pcs / 1.20 CUFT / 1 CTN | | | | |

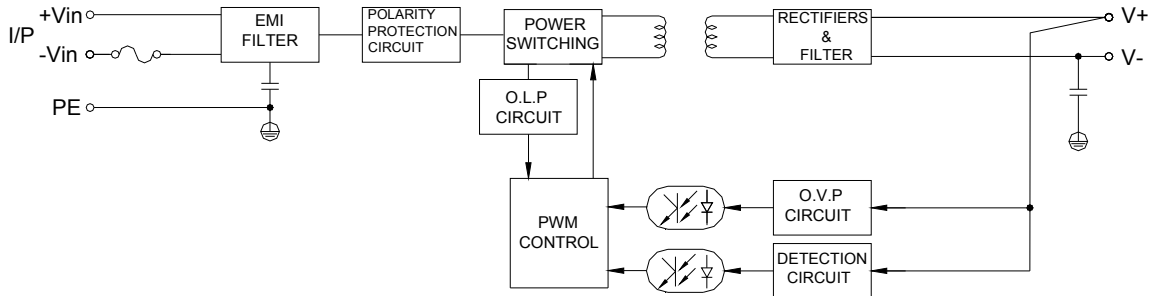
- NOTE
- ① All measurements which not mentioned are based on 48VDC input, **output Max** at ambient 25°C / 70%RH
 - ② Output tolerance included set up voltage, line regulation and load regulation.
 - ③ Ripple & noise are measured at 10~50°C condition and 20MHz of bandwidth by using a 10" ~15" twisted pair-wire terminated with a 0.1uF & a 47uF parallel capacitor.
 - ④ The operating temperature shall follow the de-rating curve in spec
 - ⑤ The power supply is considered a component of end-equipment. The end-equipment must be re-confirmed whether comply with EMC directives.



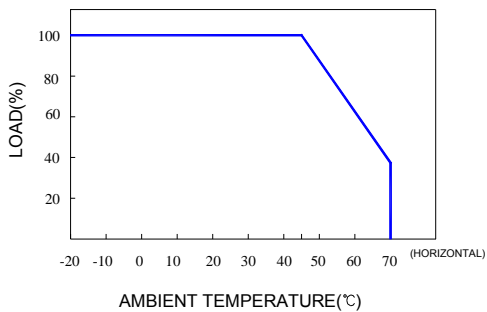
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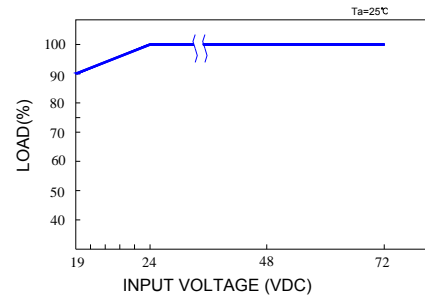
Block Diagram : DS2



De-rating Curve :

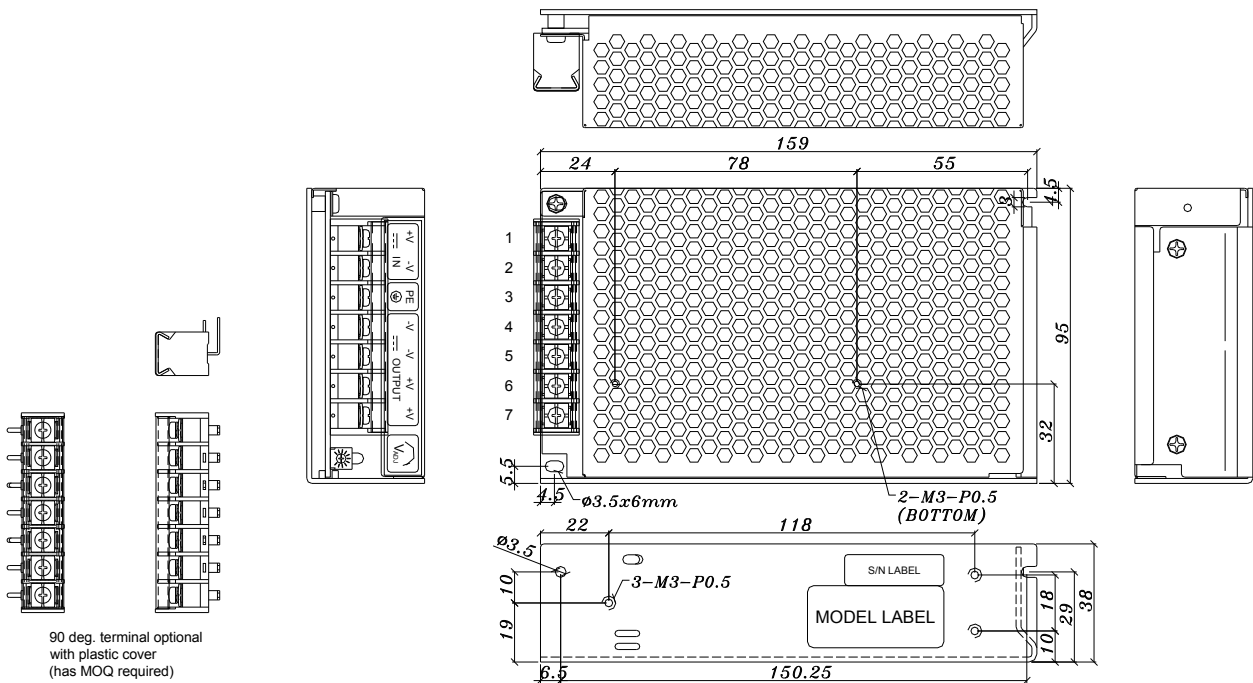


Output De-rating Vs Input Voltage :



Dimension:

(Unit: mm)



NOTES:

| 7P, PITCH 9.5mm WITH PC COVER | | | | | | | |
|-------------------------------|------|------|----|----|----|----|----|
| MODEL No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| SDS-100M-xx | +Vin | -Vin | PE | -V | -V | +V | +V |